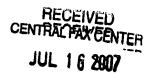
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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the Application:



Listing of Claims:

1. (Currently Amended) A communications system, comprising:

a plurality of transceiver nodes configured to utilize a time division multiple access structure to communicate between the transceiver nodes, each transceiver node generating congestion metric information based on the utilization of a link to each of its neighbors; and

the time division multiple access structure including a plurality of time slots during which the transceiver nodes are configured to communicate data cells, the data cells being transmitted from a transmission queue, the data cells including routing information and the congestion metric information; and

wherein the congestion metric information is based on comparing cell counts against a total capacity of each link; a monitoring signal of a processor buffer availability; and a monitoring signal of priority queues capacity.

- 2. (Original) The communication system of claim 1, wherein the congestion metric information is generated by a channel access subsystem.
- 3. (Previously Presented) The communication system of claim 1, wherein the cell counts are transmitted in unicast and broadcast allocated slots.
 - 4-6. (Cancelled)
- 7. (Previously Presented) The communication system of claim 1, wherein the congestion metric information is further based on the availability of unallocated slots.

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- 8. (Currently Amended) A method of propagating congestion information in a transmission system, the transmission system comprising transceiver nodes, comprising: measuring by a node, the utilization of each of the links to each of its neighbors; generating congestion metric information based on the link utilization; combining the congestion metric information with routing information; transmitting the congestion metric information and routing information; and wherein the congestion metric information is based on comparing cell counts against a total capacity of each link; a monitoring signal of a processor buffer availability; and a monitoring signal of priority queues capacity.
- 9. (Original) The method of claim 8, wherein the congestion metric information is provided as one of a predetermined number of states.
- 10. (Original) The communication system of claim 9, wherein the predetermined number of states is four (4).
- 11. (Original) The communication system of claim 8, wherein a route management subsystem disseminates the congestion metric information.
- 12. (Original) The communication system of claim 8, wherein a flow control subsystem of a second node may utilize the congestion metric information when received by the second node.
- 13. (Original) The communication system of claim 8, wherein the congestion metric information and routing information is transmitted by a route management subsystem.
- 14. (Original) The communication system of claim 8, wherein the congestion metric information is generated by a channel access subsystem.
- 15. (Original) The communication system of claim 8, wherein the transmission system is a time division multiple access (TDMA) system.

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- 16. (Currently Amended) A radio transceiver propagating congestion information in a radio network system, the radio network system comprising radio transceiver nodes, comprising:
- a means for measuring by a node, the utilization of each of the links to each of its neighbors;
- a means for generating congestion metric information based on the link utilization;
- a means for combining the congestion metric information with routing information;
- a means for transmitting the congestion metric information and routing information; and

wherein the congestion metric information is based on comparing cell counts against a total capacity of each link; a monitoring signal of a processor buffer availability; and a monitoring signal of priority queues capacity.

- 17. (Original) The radio transceiver of claim 16, wherein the congestion metric information is provided as one of a predetermined number of states.
- 18. (Original) The communication system of claim 17, wherein the predetermined number of states is four (4).
- 19. (Original) The communication system of claim 16, wherein a route management subsystem disseminates the congestion metric information.
- 20. (Original) The communication system of claim 16, wherein a flow control subsystem of a second node may utilize the congestion metric information when received by the second node.
 - 21. (Original) The communication system of claim 16, wherein the congestion metric information is generated by a channel access subsystem.
 - 22. (Original) The communication system of claim 16, wherein the radio network system is a time division multiple access (TDMA) system.

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